



9/10  
William  
6-8-88

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ZENJI HARADA, ASAMU TERAOKA  
AND TSUMEO MIKADA

Serial Number: 862,041

Group Art Unit: 235

Filed: May 12, 1986

Examiner: A. Farber

For: PICTURE PROCESSING SYSTEM

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

I MICHAEL S. BUSH, REGISTRATION NO. 81240  
CERTIFY THAT THIS CORRESPONDENCE IS BEING  
DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST  
CLASS MAIL IN AN ENVELOPE ADDRESSED TO THE  
COMMISSIONER OF PATENTS AND TRADEMARKS,  
WASHINGTON, D.C. 20231

ON May 23, 1988  
*Michael S. Bush*  
MICHAEL S. BUSH

Dear Sir:

AMENDMENT

In response to the official Office Action dated December 23, 1987, having a shortened statutory period expiring March 23, 1988 and extended by petition enclosed herewith until May 23, 1988, please amend the above-identified application as follows.

In the Specification:

Page 12, line 6, please delete "thining" and substitute  
--address-- therefor.

line 20, please delete "331" and substitute  
--3--therefor.

In the Claims:

1. (Amended) A picture processing system comprising a recording member in which a plurality of full TV screen still picture digital signals is recorded, each signal corresponding to a different still picture, and a monitoring means for reproducing

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one of said still picture digital signals and displaying the corresponding still picture on a screen, said recording member having an index recording portion in which a second plurality of digital signals is recorded, each digital signal of the second plurality corresponding to a reduced still picture and one reduced still picture digital signal being provided for each still picture, and said monitoring means including: index memory means for storing a group of reduced still picture digital signals from said recording member in predetermined memory locations as a single full TV screen index picture; circuit means for coupling the index memory means and said screen to display the group of said reduced still pictures stored in said index memory means in multiple segmented areas on said screen as an index picture; selecting means for designating multiple segmented areas on said screen to select reduced still pictures displayed in said areas; a detecting circuit for detecting the position of segmented areas designated by said selecting means on the basis of horizontal and vertical sync signals for said screen, said detecting circuit including means for detecting intermediate regions respectively provided between adjacent segmented areas on said screen; and memory control means for rearranging the locations of said reduced still picture signals stored in said index memory means on the basis of the output of said selecting means to rearrange the location of reduced still pictures in said index picture, said memory control means receiving a detecting signal corresponding to

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one of said intermediate regions for rearranging the contents of said index memory so that a selective one of said displayed reduced still pictures is interposed between two adjacent reduced pictures by designating an intermediate region between said two adjacent reduced pictures displayed on said screen.

2. (Amended). A picture processing system according to claim 1, wherein said selecting means further comprises a light pen, said [and a] detecting circuit [for] detecting the position of said segmented areas designated by said light pen on the basis of horizontal and vertical sync signals [siganls] for said screen.

Please cancel Claim 4 without prejudice to the applicants.

6. (Amended) A picture system comprising:

a recording member in which a plurality of still picture signals are recorded; and

a monitoring means for reproducing one of said recorded still picture signals for displaying said one still picture on a screen,

said recording member having an index recording portion in which a series of reduced picture signals representative of a plurality of reduced still pictures, each of which correspond to each of said still pictures, is recorded,

a group of said reduced still pictures being selectively displayed in multiple segmented areas formed on said screen as an index to said still pictures, said monitoring means

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comprising selecting means of a type operative by directly pointing to the surface of said screen for designating one of said multiple segmented areas to select one of said reduced still pictures, and a detecting circuit for detecting the position of said segmented areas designated by said selecting means on the basis of horizontal and vertical sync signals for said screen, said detecting circuit including means for detecting intermediate regions respectively provided between adjacent segmented areas on said screen, a detecting output thereof being utilized to rearrange the arrangement of said reduced still pictures on said screen, and said monitoring means having a random access reproduction function to reproduce one of designated still pictures in response to designation with said selecting means.

7. (Amended) A picture processing system according to claim 6, wherein said selecting means further comprises a light pen, said [and a] detecting circuit [for] detecting the position of said segmented areas designated by said light pen on the basis of horizontal and vertical sync signals for said screen.

Claim 8, line 2, after "means", please insert  
--further--.

Please cancel claim/9 without prejudice to the applicants.

7. (Amended) A picture processing system comprising:  
a random access recording and playback member  
having a main recording portion in which a plurality of still

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picture signals are electronically recorded and an index recording portion in which a plurality of reduced still picture signals are electronically recorded, each of the reduced still pictures corresponding to a different one of said still pictures; and

a monitoring means including: a screen for displaying either a group of said reduced still pictures in multiple segmented areas formed on said screen as an index to said still pictures or one of said still pictures; selecting means for designating one of said multiple segmented areas to select the reduced still picture displayed therein by directly pointing to the surface of said screen, and for controlling said random access recording and playback member; [and] means for electronically recording the signal of the one still picture corresponding to the selected one of said reduced still pictures; and a detecting circuit for detecting the position of said segmented areas designated by said selecting means on the basis of horizontal and vertical sync signals for said screen, said detecting circuit including means for detecting intermediate regions respectively provided between adjacent segmented areas on said screen, a detecting output thereof being utilized to rearrange the arrangement of said reduced still pictures on said screen.

REMARKS

The specification has been amended to correct minor informalities. Claims 1-2, 6-8 and 11 have been amended. Claims 4 and 9 have been cancelled without prejudice to the applicants.

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With respect to the Examiner's inquiry regarding "disk drive 331", the applicants note that page 12 of the Specification contained a purely typographical error and the passage noted by the Examiner was intended to read "disk drive 3".

With respect to the Examiner's comment regarding the failure of the co-assignee to appraise the Examiner of the existence of related co-pending patent application S.N. 767,655 during the prosecution of patent application S.N. 455,115 (the parent of the present application), the applicants note that S.N. 455,115 made reference at page 3, lines 7-17 to patent application S.N. 437,317, the parent of the afore-noted continuation application S.N. 767,655. The applicants apologize for any failure on their part to update the background of S.N. 455,115 during the approximately six months that S.N. 455,115 and 767,655 were co-pending. It is most likely that the applicants would have updated S.N. 455,115 had any paper apart from a request for an extension of time been filed during the aforementioned period of copendency. Furthermore, the applicants note that in view of the abandonment of S.N. 767,655 and the citation to the Examiner during the prosecution of S.N. 455,115 of all references identified during the prosecution of S.N. 433,317, it is submitted that it is unlikely that there is any uncited art which a reasonable Examiner would consider relevant to a decision as to whether to allow the present application to issue as a patent.

This application has been carefully considered in view

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of the rejection of Claims 1-11 under 35 U.S.C. § 103.

Reconsideration and allowance is respectfully requested in view of the following.

Claims 1-11 stand rejected under 35 U.S.C. § 103 as obvious over Tsuyuguchi (U.S. Patent No. 4,321,635) in view of Kishi et al (U.S. Patent No. 4,366,475), the Examiner stating the Tsuyuguchi shows a recording member 22, a monitor 110 and index (col. 7, lines 38-60) and further that the use of picture reduction, storage, and selection are mere design. See Kishi. In response, the applicants respectfully submit that the present invention as defined by the pending claims is neither taught nor suggested by the cited references. Accordingly, the reconsideration and withdrawal of the rejection of claims 1-3, 5-8 and 10-11 is respectfully requested.

In the present invention, an input video signal is converted to a series of digital signals and the still picture information of one color frame is written into a picture memory. The outputs of the picture memory are supplied to a disk-type recording-reproducing apparatus for recording. The outputs of the picture memory are also provided to a "squeezer" or reducer circuit. The reducer circuit reduces the picture size to one-sixteenth of the original size by thinning or removing three out of four scanning lines as well as three out of four sampling points. The outputs of the reducer circuit are fed to the disk-type recording-reproducing apparatus and recorded in tracks

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assigned for index recording.

The index track supplies a signal to a screen of a monitor TV which is divided into a plurality of segments where each of the "squeezed" or reduced information still pictures is displayed on one of the segments. A picture information may then be selected for viewing by selecting a segment of the screen containing the corresponding reduced information picture. In such a manner, applicant has invented a picture processing system which accomplishes quick selection of stored pictures from a plurality of reduced information still pictures provided on an index screen.

Between segments, the index screen is further provided with intermediate regions for use when insertion or replacement of reduced information pictures is desired. The intermediate regions can be represented by gate signals produced on the basis of horizontal and vertical sync signals and detected depending on the gate signals at the time when the intermediate regions are designated by selecting means. The reduced information picture to be inserted between two reduced information pictures on the index screen is first designated by the selecting means. The selecting means then designates the intermediate region between the two reduced information pictures. In such a manner, the applicants have provided a picture processing system where the simple and accurate insertion of a selected pictures into a desired picture position between still pictures arranged on the index screen.

While the Examiner correctly notes that Tsuyuguchi

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includes a recording member, a monitor and an index, Tsuyuguchi may not be characterized as teaching or suggesting applicants' claimed index. Tsuyuguchi discusses the use of a visual index to information streams only as a visual summary of the contents of the record disk comprised of visual images. The visual index of Tsuyuguchi is thus unrelated to the actual digital data stored in memory. What Tsuyuguchi proposes is a visual index suggestive of the information contained in the stored digital data. For example, Tsuyuguchi describes a situation example where the information recorded on the record disk is human anatomy. It is suggested that the visual index may contain a human head, hand or leg to represent various information streams on the record disk. Tsuyuguchi is silent as to any teaching or suggestion that the proposed index contains selected portions of the digital data actually recorded.

In contrast, applicants' invention includes a recorded index comprised of a multiplicity of stored picture information, each stored picture information comprised of a set of digital signals which represent a sampling of the digital signals which make up the corresponding still pictures stored in the memory. The sampled digital signals are selected such that the display of those signals will effectively result in what will appear to be a reduced imaging of the actual contents of the memory. Tsuyuguchi is silent as to any suggestion that the disclosed visual images would be comprised of selected digital signals sampled from the

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series of digital signals which make up the actual image.

Similarly, Tsuyuguchi is silent as to any teaching or suggestion of applicants' claimed means for detecting intermediate regions provided between adjacent segmented areas on the screen and memory control means for rearranging the locations of the reduced still information picture signals on the index picture by a detecting signal corresponding to an intermediate region for rearranging the contents of the index memory so that a selective one of the reduced pictures is interposed between two adjacent reduced pictures displayed on the screen.

Nor may the Kishi et al reference be properly relied upon for the teachings of the present invention that cannot be found within Tsuyuguchi. For example, the Examiner suggests that Kishi et al teaches picture reduction. However, column 3, lines 48-61 of Kishi et al clearly indicate that Kishi et al accomplishes such picture reduction by reducing the scale of the display and not by selective removal of data. Further, while the Examiner suggests that Kishi et al teaches storage and selection of pictures, the Examiner does not and cannot state that Kishi et al teaches or suggests any rearranging of a reduced information picture between adjacent reduced information pictures on an index screen by a detecting signal provided by the use of an intermediate regions between the adjacent pictures. Such a teaching is nowhere suggested by Kishi et al.

Finally, the applicants respectfully submit that the

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Examiner has failed to set forth a prima facie case of obviousness. Obviousness is determined by what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Fine, \_\_ F.2d \_\_, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). While Tsuyuguchi teaches a visual index for digital data, there is no teaching or suggestion of a visual index containing selected portions of actual stored digital data. Similarly, while Kishi et al may suggest the reducing of images, there is no suggestion of any type of reduction other than by reducing scales. As none of the references cited by the Examiner teach or suggest the use of intermediate regions between the index segments to achieve the rearranging of information displayed by the index, it is respectfully submitted that applicants' invention as defined by claims 1-3, 5-8 and 10-11 is neither taught nor suggested by any combination of the cited references.

For all the above reasons, applicants respectfully submit that the claims 1-3, 5-8 and 10-11, as above amended, are patentably distinguishable over the prior art cited by the Examiner. Accordingly, applicants respectfully request the reconsideration and withdrawal of the Examiner's rejection of claims 1-3, 5-8 and 10-11 and the allowance of claims 1-3, 5-8 and 10-11. In light of the above amendment and remarks, the present


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application is in a form for allowance. Accordingly, prompt  
action is respectfully requested.

Respectfully submitted,

  
Michael S. Bush  
Registration 31,745

Date: May 23, 1988

WOODCOCK WASHBURN KURTZ  
MACKIEWICZ & NORRIS  
One Liberty Place--46th Floor  
Philadelphia, PA 19103

(215) 568-3100

12-

AX203917



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	Z	ATTORNEY DOCKET NO.
06/862,041	05/12/86	HARADA	Z	TS-39

WOODCOCK, WASHBURN, KURTZ,  
HACKIEWITZ & NORRIS  
ONE LIBERTY PLACE  
PHILADELPHIA, PA. 19103

EXAMINER	
FABER, A	
ART UNIT	PAPER NUMBER
235	10

DATE MAILED:

08/08/88

### NOTICE OF ALLOWABILITY

#### PART I

1. ☒ This communication is responsive to 5/27/88
2. ☒ All the claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. ☒ The allowed claims are 1-3, 5-8, 10, 11
4. ☐ The drawings filed on \_\_\_\_\_ are acceptable.
5. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received. ☐ not been received. ☐ been filed in parent application Serial No. \_\_\_\_\_ filed on \_\_\_\_\_
6. ☐ Note the attached Examiner's Amendment.
7. ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
8. ☐ Note the attached Examiner's Statement of Reasons for Allowance.
9. ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

#### PART II

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

1. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. ☐ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
  - a. ☐ Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. \_\_\_\_\_. CORRECTION IS REQUIRED.
  - b. ☐ The proposed drawing correction filed on \_\_\_\_\_ has been approved by the examiner. CORRECTION IS REQUIRED.
  - c. ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
  - d. ☐ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

#### Attachments:

- Examiner's Amendment
- Examiner Interview Summary Record, PTOL-413
- Reasons for Allowance
- Notice of References Cited, PTO-892
- Information Disclosure Citation, PTO-1449

- Notice of Informal Application, PTO-152
- Notice re Patent Drawings, PTO-948
- Listing of Bonded Draftsmen
- Other

*Alan Faber*

ALAN FABER  
PATENT EXAMINER  
ART UNIT 235

AX203918

PTOL-85 and 9-4-88


**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

**NOTICE OF ALLOWANCE  
AND ISSUE FEE DUE**

 WOODCOCK, WASHBURN, KURTZ,  
 MACKIEWICZ & NORRIS  
 ONE LIBERTY PLACE  
 PHILADELPHIA, PA. 19103

 All communications regarding this  
 application should give the serial  
 number, date of filing, name of  
 applicant, and batch number.

 Please direct all communications  
 to the Attention of "OFFICE OF  
 PUBLICATIONS" unless advised  
 to the contrary.

 The application identified below has been examined and found allowable  
 for issuance of Letters Patent. **PROSECUTION ON THE MERITS IS CLOSED.**

SC/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
06/862,341	05/12/86	009	FABER, A	235 08/08/88
Inventor: Applicant:	HARADA, ZENJI			

 TITLE IN  
 INVENTION

 PICTURE PROCESSING SYSTEM FOR SELECTIVE DISPLAY  
 (AS AMENDED)

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPL. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
TS-39	35B-335.100	L19	UTILITY	NO	\$560.00	11/08/88

The amount of the issue fee is specified in 37 C.F.R. 1.18. If the applicant qualified for and has filed a verified statement of small entity status in accordance with 37 C.F.R. 1.27, the issue fee is one-half the amount for non-small entities. The issue fee due printed above reflects applicant's status as of the time of mailing this notice. A verified statement of small entity status may be filed prior to or with payment of the issue fee. However, in accordance with 37 C.F.R. 1.28, failure to establish status as a small entity prior to or with payment of the issue fee precludes payment of the issue fee in the amount so established for small entities and precludes a refund of any portion thereof paid prior to establishing status as a small entity.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE as indicated above. The application shall otherwise be regarded as ABANDONED. The issue fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office. Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of the notice of allowance, the issue fee is charged to the deposit account at the time of mailing of this notice in accordance with 37 C.F.R. 1.311. If the issue fee has been so charged, it is indicated above.

In order to minimize delays in the issuance of a patent based on this application, this Notice may have been mailed prior to completion of final processing. The nature and/or extent of the remaining revision or processing requirements may cause slight delays of the patent. In addition, if prosecution is to be reopened, this Notice of Allowance will be vacated and the appropriate Office action will follow in due course. If the issue fee has already been paid and prosecution is reopened, the applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a deposit account.

In the case of each patent issuing without an assignment, the complete post office address of the inventor(s) will be printed in the patent heading and in the Official Gazette. If the inventor's address is now different from the address which appears in the application, please fill in the information in the spaces provided on PTOL-85b enclosed. If there are address changes for more than two inventors, enter the additional addresses on the reverse side of the PTOL-85b.

The appropriate spaces in the ASSIGNMENT DATA section of PTOL-85b must be completed in all cases. If it is desired to have the patent issue to an assignee, an assignment must have been previously submitted to the Patent and Trademark Office or must be submitted not later than the date of payment of the issue fee as required by 37 C.F.R. 1.334. Where there is an assignment, the assignee's name and address must be provided on the PTOL-85b to ensure its inclusion in the printed patent.

Advance orders for 10 or more printed copies of the prospective patent can be made by completing the information in Section 4 of PTOL-85b and submitting payment therewith. If use of a deposit account is being authorized for payment, PTOL-85c should also be forwarded. The order must be for at least 10 copies and must accompany the issue fee. The copies ordered will be sent only to the address specified in section 1 or 1A of PTOL-85b.

☐ Note attached communication from the Examiner

☐ This notice is issued in view of applicant's communication filed

**IMPORTANT REMINDER**

Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. See 37 CFR 1.20 (e)-(j).

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TS-39  
PTOL-85b REV 4-86

## ISSUE FEE TRANSMITTAL

U.S. Department of Commerce  
Patent and Trademark Office

This form is provided in lieu of a formal transmittal and should be used for transmitting the Issue Fee. Sections 1A through 4 must be completed as appropriate.

INVENTOR'S ADDRESS CHANGE

SC/SERIAL NO.

INVENTOR'S NAME

INVENTOR'S ADDRESS

INVENTOR'S CITY, STATE, AND ZIP CODE

INVENTOR'S COUNTRY

INVENTOR'S PHONE NO.

INVENTOR'S FAX NO.

INVENTOR'S E-MAIL ADDRESS

INVENTOR'S SIGNATURE

INVENTOR'S DATE

INVENTOR'S CITY, STATE, AND ZIP CODE

INVENTOR'S COUNTRY

INVENTOR'S PHONE NO.

INVENTOR'S FAX NO.

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INVENTOR'S E-MAIL ADDRESS

INVENTOR'S SIGNATURE

INVENTOR'S DATE

INVENTOR'S CITY, STATE, AND ZIP CODE

INVENTOR'S COUNTRY

I hereby certify that this correspondence is being deposited with the United States Patent and Trademark Office, Patent and Trademark Office, Washington, D.C. 20231 on 11/08/88

Michael S. Bush  
Attorney for Applicant

11/8/88  
Date

Signature  
Registration No. 31,745

City, State and ZIP Code

Check if additional changes are on reverse side

MAILING INSTRUCTIONS  
All further correspondence including the Issue Fee Receipt the Patent, and advanced orders will be mailed to the address entered in section 1 on PTOL-85c, unless you direct otherwise by specifying the appropriate name and address in 1A below.

NOTICE: The Patent and Trademark Office is not responsible for the loss of correspondence sent by mail.

THE COMMISSIONER OF PATENTS AND TRADEMARKS is requested to apply the Issue Fee to the application identified below.

Signature of party in interest of record  
Michael S. Bush

Registration No. 31,745  
11/08/88

NOTE: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

SC/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
06/862,041	05/12/86	009	FABER, A	235 08/08/88
First Named Applicant	HARADA, ZENJI			

TITLE OF INVENTION  
PICTURE PROCESSING SYSTEM FOR SELECTIVE DISPLAY  
(AS AMENDED)

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
TS-39	35B-335.140	L19	UTILITY	NO	\$560.00	11/08/88

1A. Further correspondence to be mailed to the following:

2B. For printing on the patent front page, list the names of not more than 3 registered patent attorneys or agents OR, alternatively, the name of a firm having as a member a registered attorney or agent. If no name is listed, no name will be printed.

Woodcock Washburn Kurtz  
Mackiewicz & Norris;  
2  
3

DO NOT USE THIS SPACE

080 11/14/88 862041

1 142

560.00 CK

3. ASSIGNMENT DATA (print or type)  
N 10112 11/15/88 862041 23-3050 010

A. (1) ☒ This application is NOT assigned.  
(2) ☐ Assignment previously submitted to the Patent and Trademark Office.  
(3) ☐ Assignment submitted herewith.

B. For Printing On The Patent: (Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data below is only appropriate when an assignment has been previously submitted to the PTO or is submitted herewith. Completion of this form is NOT a substitute for filing of an assignment as required by 37 C.F.R. 1.334).

(1) NAME OF ASSIGNEE:

(2) ADDRESS: (City & State or Country)

(3) ☐ OF INCORPORATION, IF ASSIGNEE IS A CORPORATION:

4. The following fees are enclosed:

☒ Issue fee ☐ Advanced order ☐ Assignment recording

The following fees should be charged to deposit acc. no. 23-3050

(PTOL-85c or additional copy of PTOL-85b must be enclosed)

☐ Issue fee ☐ Assignment recording

☒ Advanced order ☒ Any additional fees due

Number of advanced order copies requested, 12  
(must be for 10 or more copies)

5. All correspondence relating to maintenance fees will be addressed to the correspondence address unless a separate "Fee Address" is provided to the Patent and Trademark Office (37 C.F.R. 1.363). A "Fee Address" may be submitted by the owner of record with the payment of the issue fee or thereafter by using form PTO-1537.

TRANSMIT THIS FORM WITH FEE

AX203920



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
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Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/862,041	05/12/86	HAKADA	Z TS-39

WOODCOCK, WASHBURN, KURTZ,  
HACKIEWICZ & MORRIS  
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PHILADELPHIA, PA. 19103

EXAMINER	
FABER, A	
ART UNIT	PAPER NUMBER
235	11

DATE MAILED:

08/30/88

*Supplemental*  
NOTICE OF ALLOWABILITY

PART I

- ☒ This communication is responsive to 5/27/88
- ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
- ☒ The allowed claims are 1-3, 5-8, 10, 11
- ☐ The drawings filed on \_\_\_\_\_ are acceptable.
- ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received, ☐ not been received, ☐ been filed in parent application Serial No. \_\_\_\_\_, filed on \_\_\_\_\_.
- ☐ Note the attached Examiner's Amendment.
- ☐ Note the attached Examiner Interview Summary Record, PTO-413.
- ☐ Note the attached Examiner's Statement of Reasons for Allowance.
- ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
- ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
- ☒ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
  - ☒ Drawing Informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. 7. CORRECTION IS REQUIRED.
  - ☐ The proposed drawing correction filed on \_\_\_\_\_ has been approved by the examiner. CORRECTION IS REQUIRED.
  - ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
  - ☐ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

Attachments:

- Examiner's Amendment
- Examiner Interview Summary Record, PTO-413
- Reasons for Allowance
- Notice of References Cited, PTO-892
- Information Disclosure Citation, PTO-1449
- Notice of Informal Application, PTO-152
- Notice re Patent Drawings, PTO-948
- Listing of Bonded Draftsmen
- Other

*Alan Faber*

ALAN FABER  
PRINCIPAL EXAMINER  
ART UNIT 235

AX203921





DOCKET NO. TS-39

88 SEP 20 AM 10:50

RECEIVED  
PATENT & TRADEMARK OFFICE  
DRAFTING BRANCH

Issue Batch :  
No.: L19

Date of Notice  
of Allowance: 8/8/88

Serial No. : 862,041

10/5/88

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ZENJI HARADA, et al.

Serial Number: 862,041

Group Art Unit: 235

Filed: May 12, 1986

Examiner: A. Faber

For: PICTURE PROCESSING SYSTEM

Box Issue Fee  
Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

TRANSMITTAL LETTER TO OFFICIAL DRAFTSMAN

Dear Sir:

Enclosed is 1 sheet of formal drawings relating to the above-identified patent application. The remaining 3 sheets of formal drawings were submitted at the date of filing of the parent of the present application and have since been transferred to the present case.

This Letter and the enclosed drawing each bear the Issue Batch No., date of the Notice of Allowance and Serial Number of the application. Please charge any comparison fees to our Deposit Account No. 23-3050.

In view of the above, the present application is believed to be in condition for issuance.

Respectfully submitted,

  
Michael S. Bush  
Registration No. 31,745

Date: September 14, 1988

WOODCOCK WASHBURN KURTZ  
MACKIEWICZ & NORRIS  
1 Liberty Place--46th Floor  
Philadelphia, PA 19103  
(215) 568-3100

1 MICHAEL S. BUSH  
CATION THAT THE  
OFFICIAL DRAFTSMAN  
CLASSIFIED  
SEP 14 1988  
MILLER

AX203922

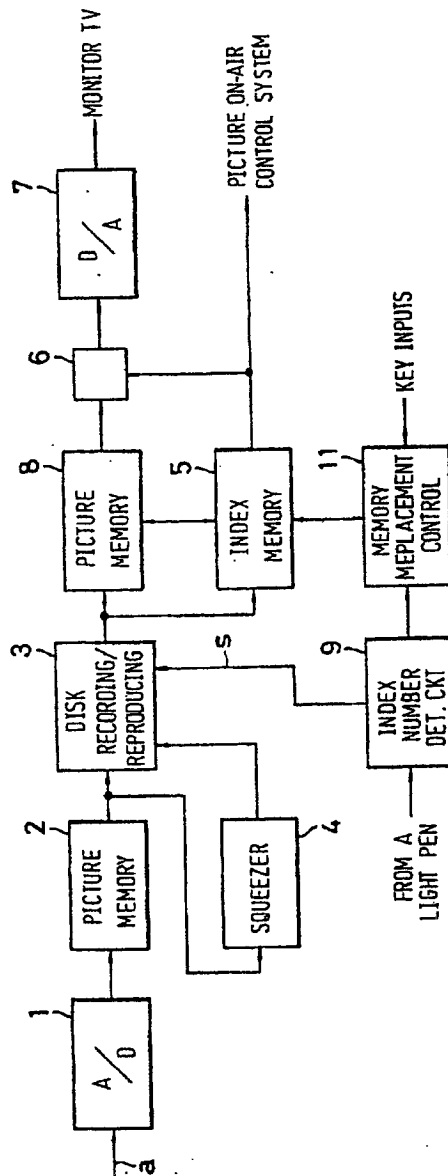
U.S. Patent

Jan. 31, 1989

Sheet 1 of 4

4,802,019

FIG. 1



AX203923

U.S. Patent Jan. 31, 1989 Sheet 2 of 4 4,802,019

FIG. 2

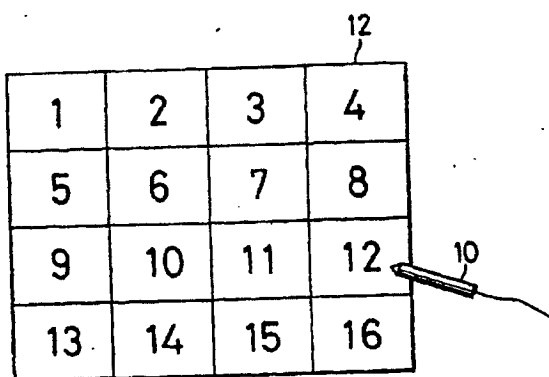
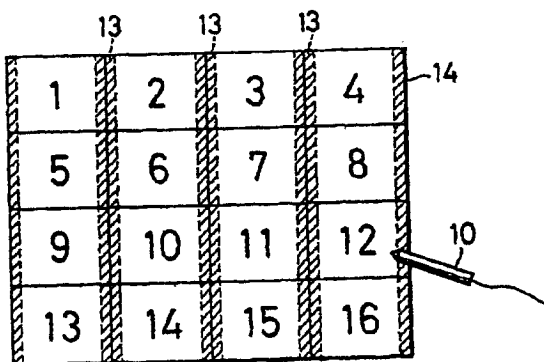


FIG. 3



AX203924

U.S. Patent

Jan. 31, 1989

Sheet 3 of 4

4,802,019

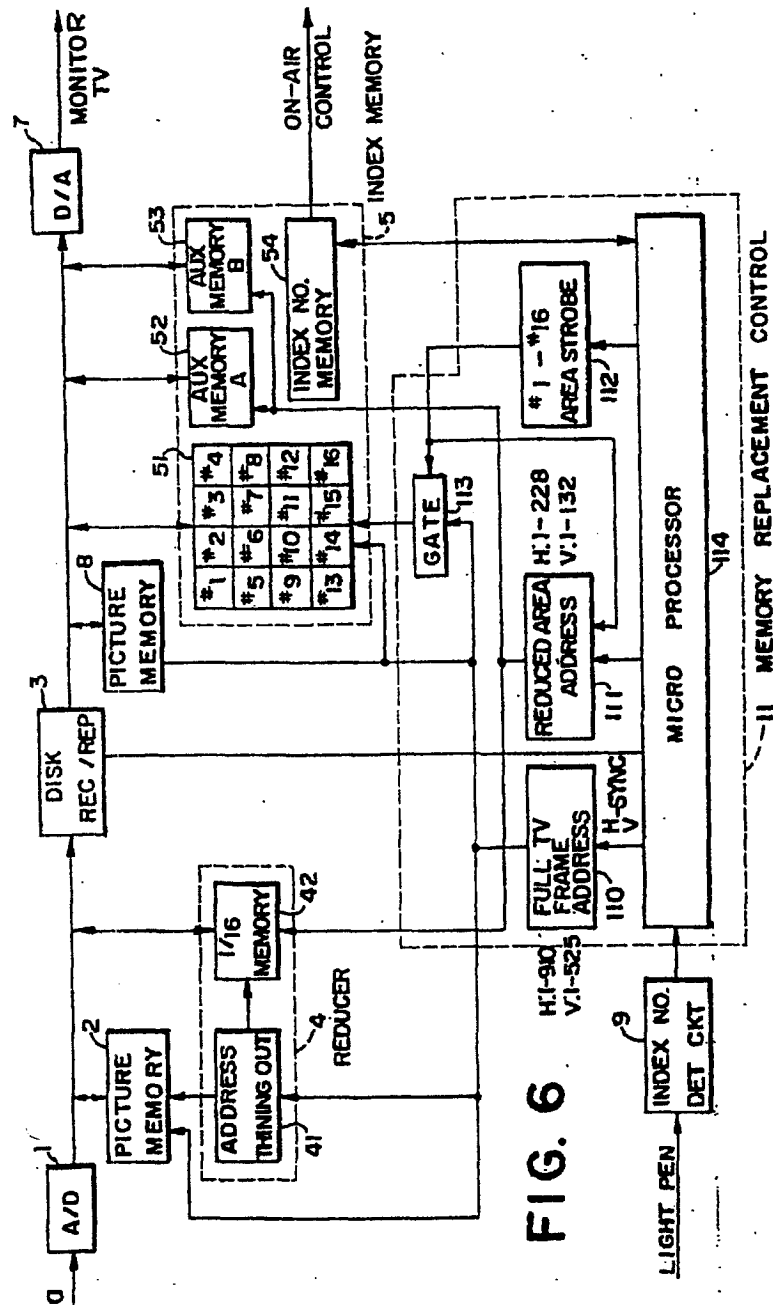
FIG. 4

1	5	2	3	14
4	6	7	8	
9	10	11	12	
13	14	15	16	

FIG. 5

17	15	16	1	2	3	4
			5	6	7	8
			9	10	11	12
			13	14	15	16

AX203925



உ

**AX203926**

---

PATENT APPLICATION SERIAL NO. **862041**

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

050 05/14/86 862041

1 101 340.00 CK

**AX203927**

[illegible]

**AX203928**

FORM PTO-878 (REV. 1-95)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	SERIAL NO <b>862041</b>	FILED DATE <b>5/28/06</b>
PATENT APPLICATION FEE DETERMINATION RECORD		APPLICANT (FIRST NAMED) <b>Zenji Harada et al</b>	

FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	<b>11</b>	<b>-20-</b>
INDEP. CLAIMS	<b>3</b>	<b>-3-</b>
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT		

\* If the difference in col. 1 is less than 30, enter "0" in col. 2

RATE	FEE
	\$170
X8-	\$
X17-	\$
X33-	\$
TOTAL	\$

OR

OTHER THAN A  
SMALL ENTITY

RATE	FEE
	\$340
X12-	\$
X34-	\$
X110-	\$
TOTAL	\$

### CLAIMS AS AMENDED - PART II

AMENDMENT A	(1)	(2)	(3)
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA
	TOTAL	MINUS	**
	INDEP.	MINUS	***
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEP. CLAIM			

RATE	ADDIT. FEE
<5	\$
x15-	\$
+50-	\$
TOTAL ADDIT. FEE	\$

OR

OTHER THAN A  
SMALL ENTITY

RATE	ADDIT. FEE
x10	\$
x30-	\$
+100-	\$
TOTAL	\$

AMENDMENT B	(1)	(2)	(3)
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA
	TOTAL	MINUS	**
	INDEP.	MINUS	***
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEP. CLAIM			

RATE	ADDIT. FEE
x5-	\$
x15-	\$
+50-	\$
TOTAL ADDIT. FEE	\$

OR

RATE	ADDIT. FEE
x10	\$
x30-	\$
+100-	\$
TOTAL	\$

AMENDMENT C	(1)	(2)	(3)
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA
	TOTAL	MINUS	**
	INDEP.	MINUS	***
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEP. CLAIM			

RATE	ADDIT. FEE
x5-	\$
x15-	\$
+50-	\$
TOTAL ADDIT. FEE	\$

OR

RATE	ADDIT. FEE
x10	\$
x30-	\$
+100-	\$
TOTAL	\$

\* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.

\*\* If the "Highest No. Previously Paid For" in THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest No. Previously Paid For" in THIS SPACE is less than 3, enter "3".

The "Highest No. Previously Paid For" (Total or Indep.) is the highest number found in the appropriate box in Col. 1.

AX203929



(2A50H5) Give details where possible

*Reconsider*

7. EXAMINER

8. GROUP ART UNIT

*264*

## DISPOSITION OF APPLICATION BY RECEIVING GROUP ART UNIT

9. ☐ ACCEPTED  
☒ NOT ACCEPTED☒ FORWARDED TO THE FOLLOWING DOC. DIV.

BY (Examined)

DATE

*2-5-87*

10. REASON(S)

*Both parent and related case are assigned to Faber in A-U-2350*

## DISPOSITION OF APPLICATION BY DOCUMENTATION

11. ☐ TRANSFER NOT APPROVED, RETURNED TO ORIGINATING GROUP☒ TRANSFER APPROVED FORWARDED TO:

GROUP ART UNIT

CLASS/SUB

*235**358/31*12. REASON(S) ☐ AS SET FORTH BY ORIGINATING GROUP.☒ OTHER:*Digital TV recording is proper for 358/31 not*

13. OFFICER

14. DOCUMENTATION DIV.

15. DATE

16. BOARDING SUPER

## SEARCHED

Class	Sub	Date	Ext.
369	30,32	12/1/87	9.2
360	10,1,72,2		
	33,1,35,1		
358	33,5,18,3		
	34,2,22		
340	72,1,72,3		
	72,4,73,1		
	74,7,70,7		
360	9,1		
		8/3/88	9.2

## PRINT CLAIM(S):

## INDEX OF CLAIMS

Claim	Date	Claim	Date
Final Original		Final Original	
1 (1)		28	
2		27	
3		28	
4		29	
5		30	
6 (8)		31	
7		32	
8		33	
9		34	
10		35	
11 (1)		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

## INTERFERENCE SEARCHED

Class	Sub	Date	Ext.
358	33,5	8/4/88	9.2
360	10,1		
	33,1		
	72,2		

## SYMBOLS

## STATUS

- ✓ ..... Rejected
- ..... Allowed
- (Through numeral) ..... Canceled
- + ..... Restriction requirement
- N ..... Nonselected invention or species
- I ..... Interference
- A ..... Appeal
- o ..... Objection

AX203930

U.S. GPO 1985-464-136

ORIGINAL CLASSIFICATION  
CLASS 358 SUBCLASS 335

APPLICANT'S NAME (PLEASE PRINT)  
HARADA ET AL

IF REISSUE, ORIGINAL PATENT NUMBER

INTERNATIONAL CLASSIFICATION (INT. CL. #)  
H04N 5/76

PTO 270 (10-84)

CLASS 369 360

CROSS REFERENCE(S)

CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)
369	32
360	10.1 72.2 33.1
358	183
340	707

GROUP ART UNIT 235

ASSISTANT EXAMINER (PLEASE STAMP OR PRINT FULL NAME)

PRIMARY EXAMINER (PLEASE STAMP OR PRINT FULL NAME)

PRIMARY EXAMINER

U.S. DEPARTMENT OF COMMERCE  
ART UTILIZATION AND TRADEMARK OFFICE

ISSUE CLASSIFICATION SLIP

PRINT CLAIM(S):

## INDEX OF CLAIMS

Claim	Date	Claim	Date
Final Original		Final Original	
1 (1)		26	
2 2		27	
3 3		28	
4 4		29	
5 5		30	
6 (6)		31	
7 7		32	
8 8		33	
9 9		34	
10 10		35	
11 (11)		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

## INTERFERENCE SEARCHED

Class	Sub	Date	Exr
358	335	8/3/88	70
360	10.1		
	33.1		
	72.2		

## SYMBOLS

## STATUS

- ✓ ..... Rejected  
 = ..... Allowed  
 - (Through numerals) Canceled  
 \* ..... Restriction requirement  
 N ..... Nonelected invention or species  
 I ..... Interference  
 A ..... Appeal  
 O ..... Objected

AX203931

# EXHIBIT 6

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

AMPEX CORPORATION,

Plaintiff,

vs.

C.A. No. 04-1373 (KAJ)

EASTMAN KODAK COMPANY,

ALTEK CORPORATION, and

CHINON INDUSTRIES, INC.,

Defendants.

DEPOSITION OF

YOSHIJI HARADA

-----  
February 17, 2006

CERTIFIED COPY

REPORTED BY: JANIS L. JENNINGS CSR NO. 3942

JOB No. 2001-377878



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GLOBAL COURT REPORTING • LEGAL VIDEOGRAPHY • TRIAL SERVICES

YOSHIJI HARADA

February 17, 2006

1 IN THE UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF DELAWARE

3

4 AMPEX CORPORATION,

5 Plaintiff,

6 vs.

C.A. No. 04-1373 (KAJ)

7 EASTMAN KODAK COMPANY,

ALTEK CORPORATION, and

8 CHINON INDUSTRIES, INC.,

9 Defendants.

10

11

12

--oOo--

13 BE IT REMEMBERED that, pursuant to Notice, and on

14 Friday, February 17, 2006, commencing at the hour of

15 9:45 a.m., at ROPES & GRAY LLP, 525 University Avenue,

16 Suite 300, Palo Alto, California, before me, JANIS L.

17 JENNINGS, a Certified Shorthand Reporter, License No.

18 3942, State of California, personally appeared

19 YOSHIJI HARADA

20

21 called as a witness by Plaintiff, who, having been first

22 duly sworn, was examined and testified as follows:

23

--oOo--

24

25

YOSHIJI HARADA

February 17, 2006

1 BY MR. BEAMER:

2 Q. When you say that the memory retained the  
3 images without erasing memory, what do you mean?

4 A. So, for example, you can take a look at the  
5 drawing on page 4650, or you could can look at the other  
6 drawing. But if you change the order of the index or  
7 change the order, so if these all 16 windows are field  
8 by pictures and then if you want to put the image on the  
9 first column or --

10 INTERPRETER FIELD: Position.

11 THE WITNESS: -- first position. You have to  
12 make it available. You have to make the first position  
13 available for the picture we want to move.

14 So you have to -- if you erase the picture on  
15 the first position without recording it to memory, then  
16 if you want to use it later, you have to read it from  
17 the disk one more time. So without erasing that picture  
18 in the memory, we keep it in the memory. That's what I  
19 meant.

20 BY MR. BEAMER:

21 Q. So your invention included the idea of being  
22 able to rearrange these reduced size pictures in memory  
23 without reading them out of disk again; is that correct?

24 A. Yes.

25 Q. And did part of your invention also include

YOSHIJI HARADA

February 17, 2006

1 Q. Given just figure 1 and its description in the  
2 application that we've been looking at, would someone be  
3 able to make and use a size reducer in this type of  
4 circuit without any trouble?

5 A. I would say it was easy to make around this  
6 time of the period.

7 Q. Would you turn to the page last three digits  
8 831 of Exhibit 3. Starting on the third line of this  
9 page there's a reference to a BBD circuit which has 58  
10 line registers. Do you know what that's referring to?

11 A. I first have to read this.

12 Q. Do you want more to be read?

13 A. I think this refers to reduced size picture of  
14 one fourth of a line.

15 INTERPRETER FIELD: One fourth of the lines.

16 INTERPRETER SELLAND: Oh, the lines.

17 BY MR. BEAMER:

18 Q. What is a BBD circuit?

19 A. I have no recollection about this portion.

20 Q. Have you heard -- are you familiar with the  
21 term bucket brigade device?

22 A. Yes, I have heard of it. Charge coupled  
23 device, it is also called a charge coupled device and  
24 then it transfers data as if like a bucket brigade. It  
25 passes data like bucket brigade.

YOSHIJI HARADA

February 17, 2006

1 Q. And the frame would be written into picture  
2 memory 8 because you had selected in this case image 12?

3 A. Yes. It would have been called.

4 Q. And looking at item 11 in figure 1, what is  
5 that?

6 A. That is what is performing the reordering or  
7 rearrangement control.

8 Q. And what was inside box 11 in order to do that  
9 control?

10 A. Well, all that was in there was a control  
11 board. Do I need to go into all of that?

12 Q. Well, control board, does that mean a  
13 microprocessor?

14 A. Yes. It did have a microprocessor.

15 Q. And did any of the other components shown in  
16 figure 1 contain a microprocessor?

17 A. Yes.

18 Q. Which other ones?

19 A. We used one in the reducer.

20 Q. That's item 4?

21 A. Yes. We used lots of them actually otherwise,  
22 too. I think we used about 30.

23 Q. And just from looking at figure 1, how can you  
24 tell that there's a microprocessor in box 11?

25 A. I told the person who was building this



# EXHIBIT 7

Redacted

# EXHIBIT 8

09:07:25 1

09:07:25 2

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

4

AMPEX CORPORATION,

6

Plaintiff,

C.A. No.

7

-against-

04-1373-KAJ

8

EASTMAN KODAK COMPANY, ALTEK CORPORATION  
and CHINON INDUSTRIES, INC.,

9

Defendants.

10

11

May 3, 2006

9:35 a.m.

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Videotaped Deposition of BRAD A. MYERS,  
taken by Plaintiff, pursuant to Notice, at the  
offices of Ropes & Gray, 1251 Avenue of the  
Americas, New York, New York, before TAMMEY M.  
PASTOR, a Registered Professional Reporter,  
Certified LiveNote Reporter and Notary Public  
within and for the State of New York.

ORIGINAL



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A MERRILL COMPANY

420 Lexington Ave  
Suite 2108  
New York, NY 10170

tel (212) 557-7400  
tel (800) 325-3376  
fax (212) 692-9171

www.merrillcorp.com

09:56:48 1

BRAD A. MYERS

09:56:52 2

control circuit 11 to be lacking in written

09:56:55 3

description and/or not enabled?

09:57:29 4

A. As I recall that is what the

09:57:30 5

examiner said.

09:57:33 6

Q. Is it your opinion that the

09:57:37 7

memory replacement control circuit 11 was

09:57:41 8

sufficiently disclosed in the parent

09:57:43 9

application to the Harada patent?

09:57:46 10

A. Yes.

09:57:49 11

Q. Am I correct then that you

09:57:50 12

disagree with the patent examiner as to

09:57:52 13

whether memory replacement control circuit 11

09:57:56 14

was properly disclosed in the parent

09:57:58 15

application to the Harada patent?

09:58:00 16

A. Yes.

09:58:16 17

Q. Referring again to figure 1 of

09:58:18 18

the Harada patent. Can you look locate on

09:58:28 19

this figure a random access memory situated

09:58:32 20

between squeezer 4 and disk

09:58:35 21

producing/recording box 3?

09:58:58 22

A. As I explain in my report in

09:59:00 23

paragraphs 101 through 107 I think one of

09:59:11 24

ordinary skill in the art would understand

09:59:13 25

that memory would be there, even though it is

**CERTIFICATE OF SERVICE**

I, Julia Heaney, hereby certify that on May 31, 2006, I caused to be electronically filed the foregoing with the Clerk of the Court using CM/ECF, which will send notification of such filing(s) to the following:

Paul M. Lukoff, Esquire  
David E. Brand, Esquire  
Prickett, Jones & Elliott, P.A.

and that I caused copies to be served upon the following in the manner indicated:

**BY HAND**

Paul M. Lukoff, Esquire  
Prickett, Jones, Elliott, P.A.  
1310 King Street  
Wilmington, DE 19899

**BY FEDERAL EXPRESS**

Michael J. Summersgill, Esquire  
Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, MA 02109

/s/ Julia Heaney  
Julia Heaney (#3052)